

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A telecommunications system for providing a facility for communicating internet packet data with a mobile communications user equipment, the internet packet data carrying payload data including a plurality of different data types, the system comprising

- a gateway support node operable to provide an interface for communicating the data packets between the mobile communications user equipment and the a packet data telecommunications network,
- a service support node operable to communicate the data packets between the gateway support node and the mobile communications user equipment using a radio network controller, the radio network controller being operable to provide a radio access bearer for communicating the data packets with the mobile communications user equipment, wherein at least one of the gateway support node and the mobile communications user equipment are operable
 - to parse the payload data in each data packet to determine a number of the plurality of different data types and a number of data symbols in each of the different data types,
 - to generate a radio access bearer sub-flow indicator providing an indication of the number of different types of data in the payload and the number of symbols in each different data type,
 - to form a transport frame for each data packet by combining the payload data for each data packet with the sub-flow indicator, the transport frame being used to communicate each data packet between the gateway support node and the radio network controller via the service support node, and the data packets are communicated between the radio network controller and the mobile communications user equipment by
 - detecting the sub-flow indicator, and in accordance with the sub-flow indicator
 - arranging for the data from each of the different data fields to be communicated via a different radio access bearer providing different quality of service parameters appropriate for the different data type.

2. (currently amended) A telecommunications system as claimed in Claim 1, wherein at least one of the gateway support node and the mobile communications user equipment are operable to form the transport frame by generating a service data unit from the payload data and

4 an internet protocol header from each data packet, and combining the service data unit with the
5 sub-flow indicator.

1 3. (currently amended) A telecommunications system as claimed in Claim 2, wherein the
2 mobile communications user equipment and the radio network controller each include a packet
3 data protocol layer which is operable

4 to remove the internet protocol header from the service data unit before communication,
5 and

6 to add the internet protocol header to the service data unit after communication of the
7 payload data via each of the sub-flow radio access bearers.

1 4. (currently amended) A telecommunications system as claimed in Claim 2 ~~or 3~~, wherein
2 the internet header is compression encoded before being combined with the payload data to form
3 the service data unit.

1 5. (original) A telecommunications system as claimed in Claim 4, wherein the compressed
2 internet protocol header is decompressed when removed from the service data unit to reform the
3 internet packets within the gateway support node.

1 6. (currently amended) A telecommunications system as claimed in ~~any preceding Claim~~
2 Claim 1, wherein the payload data of the internet packet includes a ~~frame of data~~ data frame
3 formed from an adaptive multi-rate speech coded, the data frame providing the plurality of the
4 different types of data.

1 7. (currently amended) A telecommunications system as claimed in ~~any preceding Claim~~
2 Claim 1, wherein the mobile radio telecommunications network is operable in accordance with
3 the General Packet Radio System (GPRS), the gateway support node being a gateway GPRS
4 support node, and the service support node being a service GPRS support node.

1 8. (currently amended) A method for communicating internet packet data with a mobile
2 communications user equipment, the internet packet data carrying payload data including a
3 plurality of different data types, the method comprising
4 providing an interface for communicating the data packets between the mobile
5 communications user equipment and a packet data telecommunications network,
6 communicating the data packets between the interface and the mobile communications
7 user equipment using a radio network controller, the radio network controller being operable to
8 provide radio access bearers for communicating the data packets to and/or from the mobile
9 communications user equipment, wherein the communicating the data packets between the
10 interface and the mobile communications user equipment comprises
11 parsing the payload data in each data packet to determine a number of the plurality of
12 different types of data and a number of data symbols in each of the different data types,
13 generating a radio access bearer sub-flow indicator providing an indication of the number
14 of different types of data in the payload and the number of symbols in each different data type,
15 forming a transport frame for each data packet by combining the payload data for each
16 data packet with the sub-flow indicator, the transport frame being used to communicate each data
17 packet between the interface and the radio network controller, and
18 communicating the data packets between the mobile communications user equipment and
19 the radio network controller by
20 detecting the sub-flow indicator, and in accordance with the sub-flow indicator
21 arranging for the data from each of the different data fields to be communicated via a
22 different radio access bearer providing different quality of service parameters appropriate for the
23 different data type.

1 9. (original) A method as claimed in Claim 8, wherein the forming the transport frame
2 comprises
3 generating a service data unit from the payload data and an internet protocol header from
4 each data packet, and
5 combining the service data unit with the sub-flow indicator.

1 10. (currently amended) A method as claimed in Claim 9, wherein the communicating the
2 data packets between the mobile communications user equipment and the radio network
3 controller comprises

4 removing the internet protocol header from the service data unit before communication,
5 and
6 adding the internet protocol header to the service data unit after communication of the
7 payload data via each of the sub-flow radio access bearers.

1 11. (currently amended) A method as claimed in Claims 9 ~~or 10~~, wherein the forming the
2 transport frame comprises
3 compression encoding the internet header before combining with the payload data to form
4 the service data unit.

1 12. (original) A method as claimed in Claim 11, comprising
2 compression decoding the internet header when removed from the service data unit to
3 reform the internet packets within the gateway support node.

1 13. (currently amended) A method as claimed in ~~any of Claims 8 to 12~~ Claim 8, wherein the
2 payload data of the internet packet includes a ~~frame of data~~ data frame formed from an adaptive
3 multi-rate speech coded, the data frame providing the plurality of the different types of data.

1 14. (original) A gateway support node for communicating internet data packets between user
2 equipment and a packet data telecommunications network, the internet packet data carrying
3 payload data which includes a plurality of different types of data, the gateway support node
4 comprising

5 a data packet processing layer, and
6 a user data tunnelling layer operable to provide a virtual channel for communicating the
7 processed data packets via an internet protocol communications layer, wherein the data packet
8 processing layer is operable

9 to parse the payload data in each data packet to determine a number of the plurality of
10 different data types and the number of data symbols in each of the different data types,

11 to generate a radio access bearer sub-flow indicator providing an indication of a number
12 of different types of data in the payload and a number of symbols in each different data type,

13 to form a transport frame for each data packet by combining the payload data for each
14 data packet with the sub-flow indicator, the transport frame being used to communicate each

15 processed data packet between the gateway support node and a radio network controller via a
16 service support node using the user data tunnelling layer.

1 15. (currently amended) A gateway support node as claimed in Claim 14, where the data
2 packet processing layer is operable to form the transport frame by generating a service data unit
3 from the payload data and an internet protocol header from each data packet, and combining the
4 service data unit with the sub-flow ~~indictor~~ indicator.

1 16. (original) A gateway support node as claimed in Claim 15, wherein the data packet
2 processing layer is operable to compression encode the internet protocol header before the
3 internet protocol header is combined with the payload data to form the service data unit.

1 17. (original) A gateway support node as claimed in Claim 16, wherein the data packet
2 processing layer is operable to compression decode the internet protocol header when removed
3 from the service data unit to reform the internet packets.

1 18. (original) A gateway support node as claimed in Claim 17, wherein the gateway support
2 node is a gateway general packet radio system support node.

1 19. (currently amended) A mobile communications user equipment for receiving internet
2 data packets from a gateway support node according to ~~any of Claims 14 to 18~~ Claim 14 via a
3 radio network controller, the internet packet data carrying payload data which includes a plurality
4 of different types of data, the mobile communications user equipment comprising
5 a plurality of radio access bearers in combination with the radio network controller each
6 radio access bearer providing quality of service parameters appropriate for receiving one of the
7 different types of data of the internet protocol data packet, and
8 a data packet processing layer operable to reform the internet protocol packet data by
9 combining the different data types into a ~~frame of data~~ data frame determined from a number of
10 data symbol received from each of the different radio access bearers.

1 20. (currently amended) A mobile communications user equipment as claimed in Claim 19,
2 comprising a packet data protocol layer operable to add an internet protocol header after
3 communication of the payload data via each of the sub-flow radio access bearers.

1 21. (currently amended) A mobile communications user equipment for communicating
2 internet data packets to a gateway support node according to ~~any of Claims 14 to 18~~ Claim 14 via
3 a radio network controller, the internet packet data carrying payload data which include a
4 plurality of different types of data, the mobile communications user equipment comprising
5 an internet protocol packet processing layer operable
6 to parse the payload data in each data packet to determine a number of the plurality of
7 different data types and the number of data symbols in each of the different data types,
8 to generate a radio access bearer sub-flow indicator providing an indication of a number
9 of different types of data in the payload and a number of symbols in each different data type, and
10 in accordance with the sub-flow indicator arranging for the data from each of the different data
11 fields to be communicated via a different radio access bearer providing different quality of
12 service parameters appropriate for the different data type.

22. (canceled)

23. (canceled)

1 24. (currently amended) A computer program having computer executable instructions,
2 which when loaded on to a data processor causes the data processor to perform the method
3 according to ~~any of Claims 8 to 13~~ Claim 8.

1 25. (currently amended) A computer program product having a computer readable medium
2 having recorded thereon information signals representative of the computer program claimed in
3 Claim ~~23 or~~ 24.

26. (canceled)

27. (canceled)

Please add the following new claims:

- 1 28. (new) A telecommunications system as claimed in Claim 3, wherein the internet header
2 is compression encoded before being combined with the payload data to form the service data
3 unit.
- 1 29. (new) A telecommunications system as claimed in Claim 28, wherein the compressed
2 internet protocol header is decompressed when removed from the service data unit to reform the
3 internet packets within the gateway support node.
- 1 30. (new) A telecommunications system as claimed in Claim 2, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.
- 1 31. (new) A telecommunications system as claimed in Claim 3, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.
- 1 32. (new) A telecommunications system as claimed in Claim 4, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.
- 1 33. (new) A telecommunications system as claimed in Claim 5, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.
- 1 34. (new) A telecommunications system as claimed in Claim 28, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.
- 1 35. (new) A telecommunications system as claimed in Claim 29, wherein the payload data of
2 the internet packet includes a data frame formed from an adaptive multi-rate speech coded, the
3 data frame providing the plurality of the different types of data.

1 36. (new) A telecommunications system as claimed in Claim 2, wherein the mobile radio
2 telecommunications network is operable in accordance with the General Packet Radio System
3 (GPRS), the gateway support node being a gateway GPRS support node, and the service support
4 node being a service GPRS support node.

1 37. (new) A telecommunications system as claimed in Claim 3, wherein the mobile radio
2 telecommunications network is operable in accordance with the General Packet Radio System
3 (GPRS), the gateway support node being a gateway GPRS support node, and the service support
4 node being a service GPRS support node.

1 38. (new) A telecommunications system as claimed in Claim 4, wherein the mobile radio
2 telecommunications network is operable in accordance with the General Packet Radio System
3 (GPRS), the gateway support node being a gateway GPRS support node, and the service support
4 node being a service GPRS support node.

1 39. (new) A telecommunications system as claimed in Claim 5, wherein the mobile radio
2 telecommunications network is operable in accordance with the General Packet Radio System
3 (GPRS), the gateway support node being a gateway GPRS support node, and the service support
4 node being a service GPRS support node.

1 40. (new) A telecommunications system as claimed in Claim 6, wherein the mobile radio
2 telecommunications network is operable in accordance with the General Packet Radio System
3 (GPRS), the gateway support node being a gateway GPRS support node, and the service support
4 node being a service GPRS support node.

1 41. (new) A method as claimed in Claim 10, wherein the forming the transport frame
2 comprises
3 compression encoding the internet header before combining with the payload data to form
4 the service data unit.

1 42. (new) A method as claimed in Claim 41, comprising
2 compression decoding the internet header when removed from the service data unit to
3 reform the internet packets within the gateway support node.

1 43. (new) A method as claimed in Claim 9, wherein the payload data of the internet packet
2 includes a data frame formed from an adaptive multi-rate speech coded, the data frame providing
3 the plurality of the different types of data.

1 44. (new) A method as claimed in Claim 10, wherein the payload data of the internet packet
2 includes a data frame formed from an adaptive multi-rate speech coded, the data frame providing
3 the plurality of the different types of data.

1 45. (new) A method as claimed in Claim 11, wherein the payload data of the internet packet
2 includes a data frame formed from an adaptive multi-rate speech coded, the data frame providing
3 the plurality of the different types of data.

1 46. (new) A method as claimed in Claim 12, wherein the payload data of the internet packet
2 includes a data frame formed from an adaptive multi-rate speech coded, the data frame providing
3 the plurality of the different types of data.

1 47. (new) A mobile communications user equipment for receiving internet data packets from
2 a gateway support node according to Claim 15 via a radio network controller, the internet packet
3 data carrying payload data which includes a plurality of different types of data, the mobile
4 communications user equipment comprising
5 a plurality of radio access bearers in combination with the radio network controller each
6 radio access bearer providing quality of service parameters appropriate for receiving one of the
7 different types of data of the internet protocol data packet, and
8 a data packet processing layer operable to reform the internet protocol packet data by
9 combining the different data types into a data frame determined from a number of data symbol
10 received from each of the different radio access bearers.

1 48. (new) A mobile communications user equipment for receiving internet data packets from
2 a gateway support node according to Claim 16 via a radio network controller, the internet packet
3 data carrying payload data which includes a plurality of different types of data, the mobile
4 communications user equipment comprising
5 a plurality of radio access bearers in combination with the radio network controller each
6 radio access bearer providing quality of service parameters appropriate for receiving one of the
7 different types of data of the internet protocol data packet, and
8 a data packet processing layer operable to reform the internet protocol packet data by
9 combining the different data types into a data frame determined from a number of data symbol
10 received from each of the different radio access bearers.

1 49. (new) A mobile communications user equipment for receiving internet data packets from
2 a gateway support node according to Claim 17 via a radio network controller, the internet packet
3 data carrying payload data which includes a plurality of different types of data, the mobile
4 communications user equipment comprising
5 a plurality of radio access bearers in combination with the radio network controller each
6 radio access bearer providing quality of service parameters appropriate for receiving one of the
7 different types of data of the internet protocol data packet, and
8 a data packet processing layer operable to reform the internet protocol packet data by
9 combining the different data types into a data frame determined from a number of data symbol
10 received from each of the different radio access bearers.

1 50. (new) A mobile communications user equipment for receiving internet data packets from
2 a gateway support node according to Claim 18 via a radio network controller, the internet packet
3 data carrying payload data which includes a plurality of different types of data, the mobile
4 communications user equipment comprising
5 a plurality of radio access bearers in combination with the radio network controller each
6 radio access bearer providing quality of service parameters appropriate for receiving one of the
7 different types of data of the internet protocol data packet, and
8 a data packet processing layer operable to reform the internet protocol packet data by
9 combining the different data types into a data frame determined from a number of data symbol
10 received from each of the different radio access bearers.

1 51. (new) A mobile communications user equipment as claimed in Claim 47, comprising a
2 packet data protocol layer operable to add an internet protocol header after communication of the
3 payload data via each of the sub-flow radio access bearers.

1 52. (new) A mobile communications user equipment as claimed in Claim 48, comprising a
2 packet data protocol layer operable to add an internet protocol header after communication of the
3 payload data via each of the sub-flow radio access bearers.

1 53. (new) A mobile communications user equipment as claimed in Claim 49, comprising a
2 packet data protocol layer operable to add an internet protocol header after communication of the
3 payload data via each of the sub-flow radio access bearers.

1 54. (new) A mobile communications user equipment as claimed in Claim 50, comprising a
2 packet data protocol layer operable to add an internet protocol header after communication of the
3 payload data via each of the sub-flow radio access bearers.

1 55. (new) A mobile communications user equipment for communicating internet data
2 packets to a gateway support node according to Claim 15 via a radio network controller, the
3 internet packet data carrying payload data which include a plurality of different types of data, the
4 mobile communications user equipment comprising
5 an internet protocol packet processing layer operable
6 to parse the payload data in each data packet to determine a number of the plurality of
7 different data types and the number of data symbols in each of the different data types,
8 to generate a radio access bearer sub-flow indicator providing an indication of a number
9 of different types of data in the payload and a number of symbols in each different data type, and
10 in accordance with the sub-flow indicator arranging for the data from each of the different data
11 fields to be communicated via a different radio access bearer providing different quality of
12 service parameters appropriate for the different data type.

1 56. (new) A mobile communications user equipment for communicating internet data
2 packets to a gateway support node according to Claim 16 via a radio network controller, the
3 internet packet data carrying payload data which include a plurality of different types of data, the
4 mobile communications user equipment comprising

5 an internet protocol packet processing layer operable
6 to parse the payload data in each data packet to determine a number of the plurality of
7 different data types and the number of data symbols in each of the different data types,
8 to generate a radio access bearer sub-flow indicator providing an indication of a number
9 of different types of data in the payload and a number of symbols in each different data type, and
10 in accordance with the sub-flow indicator arranging for the data from each of the different data
11 fields to be communicated via a different radio access bearer providing different quality of
12 service parameters appropriate for the different data type.

1 57. (new) A mobile communications user equipment for communicating internet data
2 packets to a gateway support node according to Claim 17 via a radio network controller, the
3 internet packet data carrying payload data which include a plurality of different types of data, the
4 mobile communications user equipment comprising
5 an internet protocol packet processing layer operable
6 to parse the payload data in each data packet to determine a number of the plurality of
7 different data types and the number of data symbols in each of the different data types,
8 to generate a radio access bearer sub-flow indicator providing an indication of a number
9 of different types of data in the payload and a number of symbols in each different data type, and
10 in accordance with the sub-flow indicator arranging for the data from each of the different data
11 fields to be communicated via a different radio access bearer providing different quality of
12 service parameters appropriate for the different data type.

1 58. (new) A mobile communications user equipment for communicating internet data
2 packets to a gateway support node according to Claim 18 via a radio network controller, the
3 internet packet data carrying payload data which include a plurality of different types of data, the
4 mobile communications user equipment comprising
5 an internet protocol packet processing layer operable
6 to parse the payload data in each data packet to determine a number of the plurality of
7 different data types and the number of data symbols in each of the different data types,
8 to generate a radio access bearer sub-flow indicator providing an indication of a number
9 of different types of data in the payload and a number of symbols in each different data type, and
10 in accordance with the sub-flow indicator arranging for the data from each of the different data

11 fields to be communicated via a different radio access bearer providing different quality of
12 service parameters appropriate for the different data type.

1 59. (new) A computer program having computer executable instructions, which when loaded
2 on to a data processor causes the data processor to perform the method according to Claim 9.

1 60. (new) A computer program having computer executable instructions, which when loaded
2 on to a data processor causes the data processor to perform the method according to Claim 10.

1 61. (new) A computer program having computer executable instructions, which when loaded
2 on to a data processor causes the data processor to perform the method according to Claim 11.

1 62. (new) A computer program having computer executable instructions, which when loaded
2 on to a data processor causes the data processor to perform the method according to Claim 12.

1 63. (new) A computer program having computer executable instructions, which when loaded
2 on to a data processor causes the data processor to perform the method according to Claim 13.

1 64. (new) A computer program product having a computer readable medium having recorded
2 thereon information signals representative of the computer program claimed in Claim 59.

1 65. (new) A computer program product having a computer readable medium having recorded
2 thereon information signals representative of the computer program claimed in Claim 60.

1 66. (new) A computer program product having a computer readable medium having recorded
2 thereon information signals representative of the computer program claimed in Claim 61.

1 67. (new) A computer program product having a computer readable medium having recorded
2 thereon information signals representative of the computer program claimed in Claim 62.

1 68. (new) A computer program product having a computer readable medium having recorded
2 thereon information signals representative of the computer program claimed in Claim 63.